Mueller Brass Company
Permit # 180-00A
1/15/02
HAP limit: 9 tpy individual/ 22 tpy combination
NOx limit: 89.9 tpy
PM-10 limit: 88 tpy

Emission unit	Process/ design limits	Control	Requirements
Ash Dumper		Baghouse system B 75,000 ACFM capacity 2 stack ids for each of 5 modules	PM:1 pph/ 4.38 tp Pressre drop ea. Comprtmnt: 4-12" WG 50' stacks
Chip Furnace 2	33 tpy	Baghouse system B	
Channel Furnace	33 tpy	Baghouse System B	
Casting Furnace	33 tpy	Baghouse System B	
Billet Heater 1	10.8 MMBtu/hr ng fired	4,000 ACFM combustion gas exhaust through SV-PBH-001	
Billet Heater 2	10.8 MMBtu/hr ng fired	4,000 ACFM combustion gas exhaust through SV-PBH-001	
Billet heater 3	10.8 MMBtu/hr ng fired	4,000 ACFM combustion gas exhaust through SV-PBH-001	
Melting Furnace #3 S	Electric Induction furnace	Baghouse System C 120,00 ACFM Capacity 2 vents for ea. Of 8 modules	PM: 1 pph/4.38 tp Pressure drop: 4-1 28' exit vent
Melting Furnace #3 N	Electric Induction furnace	Baghouse System C	
Melting Furnace #3 W	Electric Induction furnace	Baghouse System C	
Melting Furnace #3	Electric Induction furnace	Baghouse System C	
Melting Furnace #1	Electric Induction furnace	Baghouse System A 75,000 ACFM Capacity 2 Stack IDs for each of 5 modules	PM: 1 pph / 4.38 Pressure drop: 4-1 50' stack
Melting Furnace #2	Electric Induction furnace	Baghouse System A	
Holding Furnace #6	Electric Induction furnace	Baghouse System A	
Melting Furnace #6 W	Electric Induction furnace	Baghouse System A	
Holding Furnace #5	Electric Induction furnace	Baghouse System A	
Melting Furnace #5 E	Electric Induction furnace	Baghouse System A	
Ash Chute		Baghouse System A	

Melting Furnace #5 W Electric Induction furnace	Electric Induction furnace	Baghouse System A	
Melting Furnace #5 W	Electric Induction furnace	Baghouse System A	
Launder Chutes #5 & #6	Transfer molten metal	Baghouse System A	
Melting Furnace #5 W	Electric Induction furnace	Baghouse System A	
Chip Dryer Bartlett Snow (Raymond)	Natural gas fired 10 MMBtu/hr	Wet Scrubber & Combustion gases SV00003	PM limit: 0.1 pp exhaust gas, on di basis PM: ≤2.4 pph / 1 HCL: <8.7 tpy bo dryers Stack 67'
Chip Dryer (or Allis "A" Chip Dryer) Allis Mineral Systems	Natural gas fired 3.5 MMBtu/hr	Cyclone-Afterburner (TO)-Quench (heat exchanger)-baghouse-SV0001 Combustion gases SV00012	PM: ≤2.7 pph / 1 Ave temp 1500 d 1.5 retention time Baghouse with Pr drop gauge Process Stack 61' Combustion exha 55'
Forging Pickle line: 3 vats (6 7 & 8) nitric acid vat & 2 water rinses for Brass	Throughput based on production	Scrubber Stack SV00020	Pickling lines: nitric acid < 40 m corr. to 70 deg F Hg nor 0.03 pph. HCL: <3.3 mg/m Scrubber pressure 4.5 WG Nitric acid stacks:
Forging Pickle line: 6 vats (1, 2, 4, 5, 9 & 10) nitric acid vat & water rinses for Aluminum	Throughput based on production	No controls SV00021	Stack: 52'
Forging Pickle line: Vat 3 only, caustic dip for both Aluminum & Brass	Throughput based on production	No controls SV00022	Stack 39'
#4 Coil Pickle Sulfuric Acid Pickling Tank	Throughput based on production		
#5 Coil Pickle Sulfuric Acid Pickling Tank	Throughput based on production		
Center Bay Pickle Line	Throughput based on		

Sulfuric Acid Pickling Tank	production		
HW Sludge Dryer Wastewater Sludge Dryer WWTP Flitercake dryer	Natural Gas fired Throughput based on production	SV00006 Combustion gases Dust Collection with wet scrubber SV00007	
Boiler – DV rod mill boiler	2.25 MMBtu/hr Natural gas fired	SV00005	
Forging Pre-heat & heat treat furnaces	Natural gas fired		
Hot water boilers	<1 MMBtu/hr Ng fired		
Facility heaters	Ng fired		

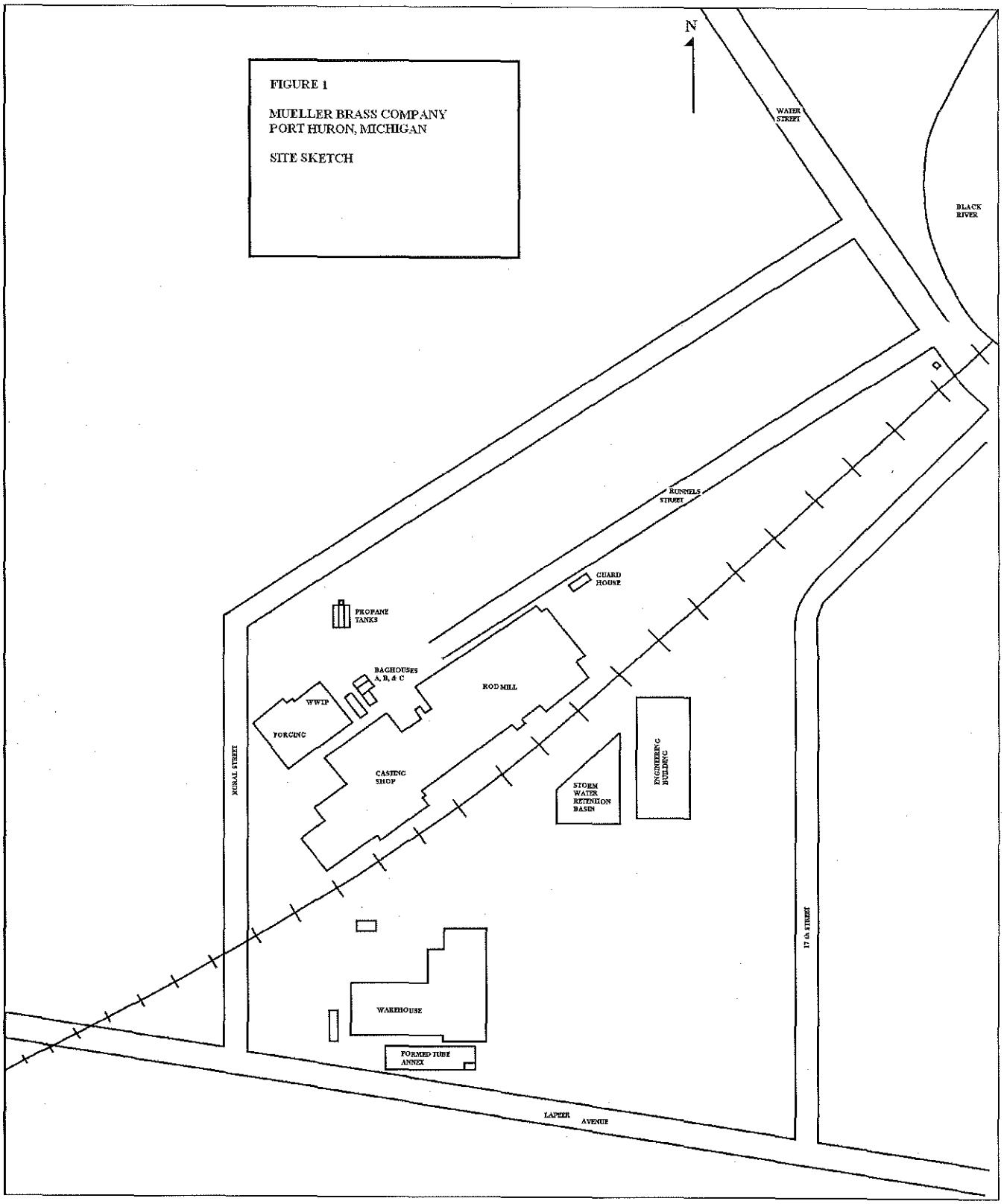
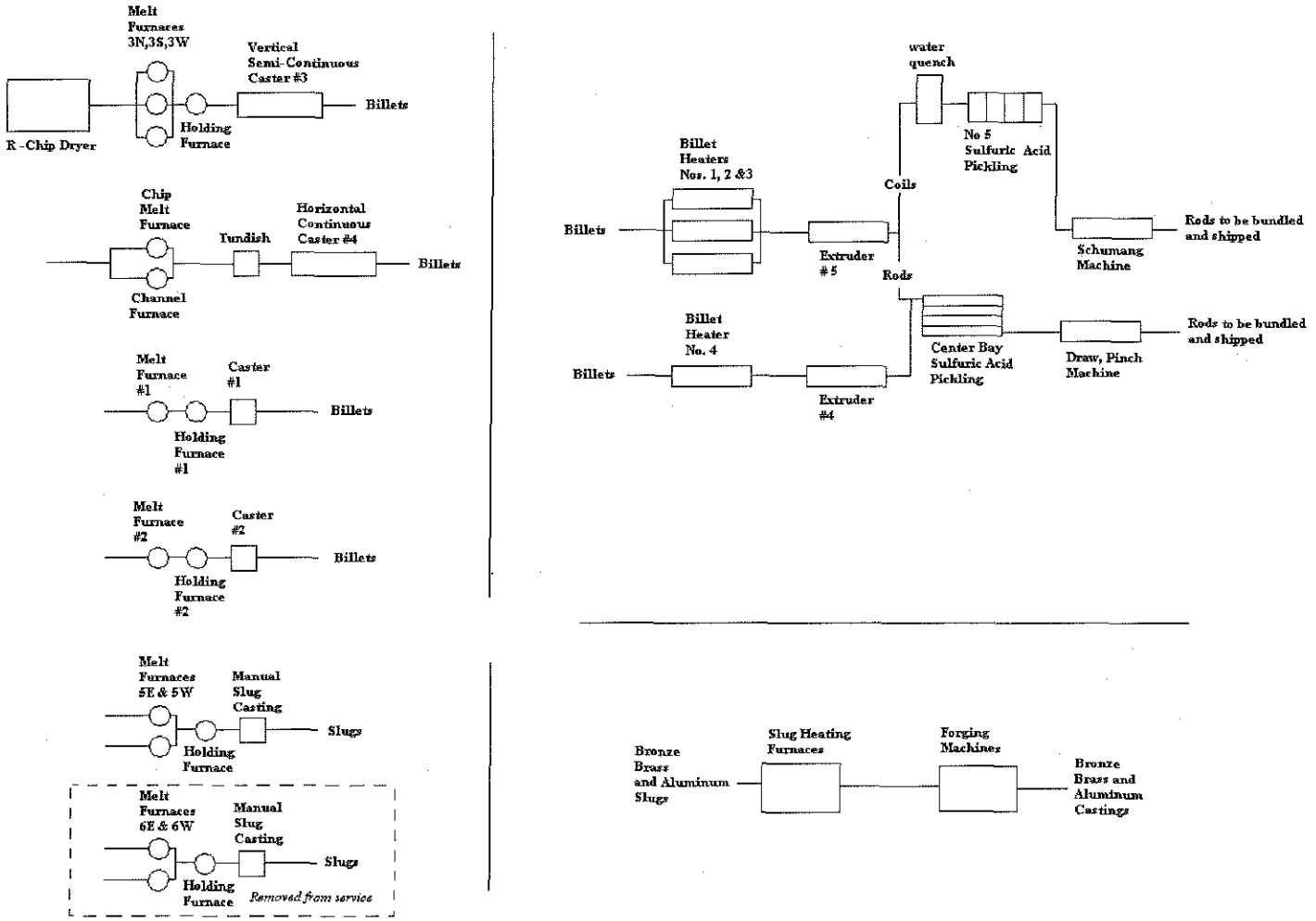


FIGURE 1
MUELLER BRASS COMPANY
PORT HURON, MICHIGAN
SITE SKETCH
N
WATER STREET
BLACK RIVER
RUNNELS STREET
GUARD HOUSE
PROPANE TANKS
BAGHOUSES A, B, & C
ROD MILL
WWTP
FORGING
CASTING SHOP
MILL STREET
STORM WATER RETENTION BASIN
ENGINEERING BUILDING
17 th STREET
WAREHOUSE
FORMED TUBE ANNEX
LAPEER AVENUE

Mueller Brass Company - Port Huron, Michigan
Process Flow Diagram



Moloney
4/3/06